



04-30-07

GEHC Dkt. No.: 135271 (SPLG 1040)  
PATENT

*Law*

IN THE UNITED STATES OFFICE OF PATENTS AND TRADEMARKS

Applicant: Geir Ultveit Haugen, et al.

Serial Number: 10/719,531

Filed: November 21, 2003

For: ULTRASOUND PROBE  
SUB-APERTURE PROCESSING

Group Art Unit: 3768

Examiner: Francis J. Jaworski

**CERTIFICATE OF MAILING BY EXPRESS MAIL TO  
THE COMMISSIONER OF PATENTS AND TRADEMARKS**

Express Mail label number: **EB 270750488 US**

Date of Mailing: **April 27, 2007**

I certify that documents listed below:

- Certificate of Mailing By Express Mail (1 pg.)
- Information Disclosure Statement Transmittal (2 pgs., *in duplicate*)
- PTO/SB/08A Form IDS listing (52) unattached US references and (5) attached foreign references – F3-F7 (3 pgs.)
- Return post card

are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. §1.10 on the date indicated above in an envelope addressed to Mail Stop: AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

*Dean Small*

Dean D. Small  
Reg. No.: 34,730  
THE SMALL PATENT LAW GROUP LLP  
611 Olive Street, Suite 1611  
St. Louis, MO 63101  
(314) 584-4080



Express Mail No. EB 270750488 US

PATENT  
GEHC Dkt No: 135271 (SPLG 1040)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Geir Ultveit Haugen, et al.

Serial No.: 10/719,531

Filed: November 21, 2003

For: ULTRASOUND PROBE SUB-APERTURE  
PROCESSING

:  
: Art Unit: 3768  
:  
: Examiner: Francis J. Jaworski  
:  
:  
:

**INFORMATION DISCLOSURE STATEMENT TRANSMITTAL**

Mail Stop: AMENDMENT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The following are submitted in the above application in compliance with 37 CFR 1.97 and 37 CFR 1.98.

- ☒ 1. A list of documents on form PTO/SB/08A (Substitute for form 1449/PTO) together with copies of each identified document and a translation thereof or a concise explanation of each non-English language document or a Search Report or communication from a non-US patent office or an International Search Report from an International Searching Authority for a patent application filed via the Patent Cooperation Treaty or document(s) cited in the application or the priority application.

This paper is submitted in accordance with:

- ☐ 2. 37 CFR 1.97(b): [within three months of national, non-CPA filing, prior to first Office Action, on the merits, or prior to first office action after filing an RCE].

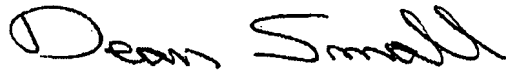
04/30/2007 BABRAHA1 00000012 070845 10719531

01 FC:1806 180.00 DA

- ☒ 3. 37 CFR 1.97(c): [before Final Office Action, Allowance, or other action closing prosecution, whichever is earlier]; and
- ☐ a. The required Certification made in item 5 below; or
- ☒ b. The \$180.00 fee specified in 37 CFR 1.17(p) for submission of this Information Disclosure Statement is authorized in item 6 below.
- ☐ 4. 37 CFR 1.97(d): [on or before issue fee payment]; and
- ☐ a. The required Certification is stated in item 5 below; and
- ☐ b. The \$180.00 fee specified in 37 C.F.R. 1.17(p) for submission of this Information Disclosure Statement is authorized in item 6 below.
- ☐ 5. Certification
- ☐ a. Each item of information contained in this Statement was first cited in any communication from a foreign patent office in a counterpart foreign patent application not more than three months prior to the filing of this Statement; or
- ☐ b. No item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign patent application and, to the knowledge of the person signing this document after making reasonable inquiry, no item of information contained in this Statement was known to any individual designated in 37 CFR 1.56(c) more than three (3) months prior to the filing date of this Statement.
- ☒ 6. Payment of all applicable fees:
- ☒ If any additional extension and/or fee is required, charge Deposit Account No. **07-0845**.
- ☐ Enclosed is a check in the amount of \$\_\_\_\_\_ in payment of all applicable fees associated with the submittal of this Information Disclosure Statement.

This document is submitted in duplicate.

Respectfully Submitted,



Dean D. Small  
Reg. No. 34,730  
THE SMALL PATENT LAW GROUP LLP  
611 Olive Street, Suite 1611  
St. Louis, Missouri 63101  
(314) 584-4080



EB 270750 488 US

PTO/SB/08A (09-06)

Approved for use through 03/31/2007. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

1

of

3

**Complete if Known**

Application Number	10/719,531
Filing Date	11/21/2003
First Named Inventor	Geir Ultveit Haugen, et al
Art Unit	3737
Examiner Name	Jaworski, Francis J
Attorney Docket Number	135271 (SPLG-1040US1)

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	A1	US- 5,417,217	5/23/1995	Morita, et al	
	A2	US- 4,058,003	11/1977	Macovski	
	A3	US- 4,127,034	11/1978	Lederman et al	
	A4	US- 4,140,022	2/1979	Maslak	
	A5	US- 4,152,678	5/1979	Scott et al	
	A6	US- 4,170,766	10/1979	Pridham et al	
	A7	US- 4,173,007	10/1979	McKeighen et al	
	A8	US- 4,180,790	12/1979	Thomas	
	A9	US- 4,208,906	6/1980	Thomenius et al	
	A10	US- 4,213,195	7/1980	Pridham	
	B1	US- 4,227,417	10/1980	Glenn	
	B2	US- 4,267,584	5/1981	McKeighen et al	
	B3	US- 4,280,203	7/1981	Gilmour	
	B4	US- 4,288,764	9/1981	Ong	
	B5	US- 4,401,957	8/1983	McKeighen et al	
	B6	US- 4,458,324	7/1984	Burke et al	
	B7	US- 4,464,726	8/1984	Chiang	
	B8	US- 4,542,653	9/1985	Liu	
	B9	US- 4,632,124	12/1986	Hiller et al	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

Examiner  
Signature

Date

Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 2 of 3**Complete if Known**

Application Number	10/719,531
Filing Date	11/21/2003
First Named Inventor	Geir Ultveit Haugen, et al
Art Unit	3737
Examiner Name	Jaworski, Francis J
Attorney Docket Number	135271 (SPLG-1040US1)

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	B10	US- 4,787,392	11/1988	Saugeon	
	C1	US- 4,809,184	2/1989	O'Donnell et al	
	C2	US- 5,030,953	7/1991	Chiang	
	C3	US- 5,063,541	11/1991	Kondo et al	
	C4	US- 5,089,983	2/1992	Chiang	
	C5	US- 5,123,415	6/1992	Daigle	
	C6	US- 5,126,962	6/1992	Chiang	
	C7	US- 5,199,437	4/1993	Langberg	
	C8	US- 5,203,335	4/1993	Noujaim et al	
	C9	US- 5,249,578	10/1993	Karp et al	
	C10	US- 5,257,629	11/1993	Kitney et al	
	D1	US- 5,269,307	12/1993	Fife et al	
	D2	US- 5,287,753	2/1994	Routh et al	
	D3	US- 5,295,485	3/1994	Shinomura et al	
	D4	US- 5,345,426	9/1994	Lipschutz	
	D5	US- 5,345,939	9/1994	Engeler et al	
	D6	US- 5,365,929	11/1994	Peterson	
	D7	US- 5,368,037	11/1994	Eberle et al	
	D8	US- 5,381,795	1/1995	Nordgren et al	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>9</sup>
		Country Code <sup>3</sup> *Number <sup>4</sup> *Kind Code <sup>5</sup> (if known)				

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 3 of 3**Complete if Known**

Application Number	10/719,531
Filing Date	11/21/2003
First Named Inventor	Geir Ultveit Haugen, et al
Art Unit	3737
Examiner Name	Jaworski, Francis J.
Attorney Docket Number	135271 (SPLG-1040US1)

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	D9	US- 5,386,830	2/1995	Powers et al	
	D10	US- 5,390,674	2/1995	Robinson et al	
	E1	US- 5,396,285	3/1995	Hedberg et al	
	E2	US- 5,402,793	4/1995	Gruner et al	
	E3	US- 5,438,994	8/1995	Starosta et al	
	E4	US- 5,450,851	9/1995	Hancock	
	E5	US- 5,456,257	10/1995	Johnson et al	
	E6	US- 5,462,057	10/1995	Hunt et al	
	E7	US- 5,483,963	1/1996	Butler et al	
	E8	US- 5,522,391	6/1996	Beaudin et al	
	E9	US- 5,528,302	6/1996	Basoghn et al	
	E10	US- 5,722,412	3/1998	Pflugrath et al	
	F1	US- 5,817,024	10/1998	Ogle et al	
	F2	US- 5,839,442	11/1998	Chiong et al	
		US-			
		US-			
		US-			
		US-			
		US-			

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
	F3	0 585 070A1	3/1994	European Pat. Off.		
	F4	0 627 635 A2	12/1994	European Pat. Off.		
	F5	42 41 712 A1	6/1993	Germany		
	F6	43 02 538 C1	4/1994	Germany		
	F7	2 219 089	11/1989	United Kingdom		

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.